

**REMARKS**

This Application has been carefully reviewed in light of the Office Action mailed May 7, 2003. To clarify various aspects of inventive subject matter, Applicant amends Claims 95, 99, 102, and 103. In order to advance prosecution of this Application, Applicant has responded to each notation by the Examiner. Applicant submits that all of the pending claims are allowable over the cited references. Applicant respectfully requests reconsideration and favorable action in this case.

**Rejections Under 35 U.S.C. § 103**

The Examiner has rejected Claims 95-97, 99, 100, and 102-104 under 35 U.S. § 103(a) as being unpatentable over U.S. Patent No. 6,091,538 by Takeda et al. ("*Tekada*") in view of U.S. Patent No. 5,815,308 by Kim et al. ("*Kim*"). Applicant respectfully traverses these claim rejections for the reasons discussed below.

Applicant submits that amended Claim 99 is patentable over *Tekada* in view of *Kim*. Among other features, amended Claim 99 recites, in part, "one or more Raman amplifiers coupled to the splitter, at least one of the Raman amplifiers receives a first pump wavelength." Additionally, amended Claim 99 recites that "one or more rare-earth doped optical amplifiers coupled to the splitter, at least one of the rare-earth doped amplifiers receives a second pump wavelength, wherein the second pump wavelength is substantially different than the first pump wavelength."

*Tekada* and *Kim*, taken alone or in combination, fail to teach or suggest a number of elements of amended Claim 95. For example, nowhere does *Tekada* contemplate a second pump wavelength that is substantially different than the first pump wavelength. Moreover, *Tekada* fails to teach or suggest coupling one or more Raman amplifiers to the splitter and coupling one or more rare-earth doped optical amplifiers to the splitter. To the extent that *Tekada* discusses coupling optical amplifiers to a splitter, this discussion is limited to coupling erbium-doped optical fibers. Consequently, *Tekada* fails to teach or suggest a broadband amplifier having one or more Raman amplifiers coupled to a splitter and "one or more rare-earth doped optical amplifiers coupled to the splitter, at least one of the rare-earth

doped amplifiers receives a second pump wavelength, wherein the second pump wavelength is substantially different than the first pump wavelength."

The *Kim* disclosure describes a bi-directional erbium-doped optical amplifier capable of improving the gain of the amplifier while maintaining a negligible bit error rate penalty. *Abstract.* Nowhere does *Kim* contemplate a second pump wavelength that is substantially different than the first pump wavelength. To the extent that *Kim* discusses pump wavelengths, this discussion is limited to pumping each amplifier with the same pump signal wavelength. *See e.g., Col. 4, Lines 54-55.* Consequently, *Kim* fails to teach or suggest a broadband amplifier having one or more Raman amplifiers coupled to a splitter and "one or more rare-earth doped optical amplifiers coupled to the splitter, at least one of the rare-earth doped amplifiers receives a second pump wavelength, wherein the second pump wavelength is substantially different than the first pump wavelength."

For at least these reasons, Applicant submits that *Tekada* and *Kim*, taken alone or in combination, fail to teach or suggest amended Claim 99. Applicant respectfully requests withdrawal of the rejection and full allowance of amended independent Claim 99 and all claims depending therefrom.

Applicant submits that amended independent Claims 95, 102, and 103 are patentable over *Tekada* in view of *Kim* for at least the reasons discussed above. Thus, Applicant respectfully requests withdrawal of the rejection and full allowance of amended Claims 95, 102, and 103 and all claims depending therefrom.

CONCLUSION

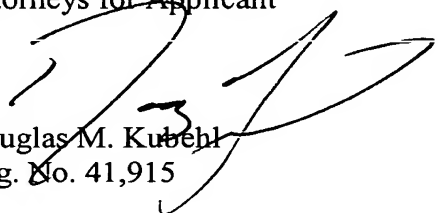
Applicant has made an earnest attempt to place this case in condition for allowance. For the foregoing reasons and for other reasons clearly apparent, Applicant respectfully requests reconsideration and full allowance of all pending Claims.

Applicant does not believe that any additional fees are due. However, the Commissioner is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 02-0384 of Baker Botts L.L.P.

If the Examiner feels that a conference would advance prosecution of this Application in any manner, Douglas M. Kubehl stands willing to conduct such a telephone interview at the convenience of the Examiner. Mr. Kubehl may be reached at 214-953-6486.

Respectfully submitted,

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